· · · · · **2**

electromechanical components that act directly on the ink to eject the ink from nozzle chambers.

- 4. In this regard, the Examiner's attention is respectfully directed to page 2, lines 14 and 15, where it is set out that: "It is important to clarify that thermoelastic actuation is characterized using force, deflection and temperature...". It is respectfully submitted that thermal inkjets of the type described in Hess do not utilize thermoelastic actuation.
- 5. The Examiner has stated that: "Hess discloses the known use of metal silicides such as titanium." The Examiner has not described the "known use". It is therefore difficult for the Applicant to address this fully. However, Applicant respectfully submits that the field of printing is extremely large and encompasses many different smaller fields such as thermal inkjet printing and microelectromechanical systems based printing of which thermoelastic actuation based printing is a field. It is therefore respectfully submitted that characteristics of materials used in thermal ink jet printing are sufficiently removed from those of thermoelastic actuation based printing that a person of ordinary skill in the field would not consider one of the fields when attempting to address a problem in the other.
- 6. In paragraph 5 of the Detailed Action, the Examiner has rejected claims 7 to 10 under 35 U.S.C. 102(b) as being anticipated by Chan.
- 7. Chan is directed to the field of thermal ink jet printing. It follows that the remarks made in connection with Hess are apposite. Applicant respectfully emphasizes that Chan does not disclose or envisage thermoelastic actuation.
- 8. In particular, the Examiner's attention is drawn to lines 10 to 24 of Chan that set out that the objects of the invention are to form barrier layers and heating resistors with titanium and titanium nitride. These are formed for the purposes of heating ink to achieve drop ejection and not for generation of sufficient elastic displacement to achieve drop ejection as would be required with thermoelastic actuation arising out of thermal expansion.

•

- 9. In paragraph 6 of the Detailed Action, the Examiner has rejected claims 9 and 10 under 35 U.S.C. 102 (b) as being anticipated by Silverbrook.
- 10. The Examiner's attention is respectfully drawn to the wording of 35 U.S.C. 102 (b): "A person shall be entitled to a patent unless the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States".
- 11. Silverbrook is not an enforceable patent. Furthermore Silverbrook was published on September 21, 2000. The present application was filed on October 20, 2000. It follows that Silverbrook is not available as a cited reference. Examiner's attention is respectfully drawn to MPEP 2126.01.

CONCLUSION

It is respectfully submitted that all of the Examiner's objections have been successfully traversed. Accordingly, it is submitted that the application is now in condition for allowance. Reconsideration and allowance of the application are courteously solicited.

Very respectfully,

Applicants/Inventors:

KIA SILVERBROOK

C/o: Silverbrook Research Pty Ltd

393 Darling Street

Balmain NSW 2041, Australia

Email: <u>kia.silverbrook@silverbrookresearch.com</u>

Telephone: +612 9818 6633 Facsimile: +61 2 9818 6711